

# Company-Led Engineering Design Projects

## DO YOU HAVE AN R&D IDEA BUT LACK THE EXPERTISE OR RESOURCES?

Heriot-Watt is a major player in addressing the needs of industry.

We are one of the UK's leading universities in business and technology and produce more graduates per year in engineering, physical sciences, mathematics and built environment than any other Scottish university.

### BUILDING A RELATIONSHIP

We are keen to work with you on a company-led engineering design project that can provide our Engineering students with relevant work experience as part of their degree studies to improve their experience and chances of employment upon graduation.

### A MUTUALLY BENEFICIAL PARTNERSHIP

There are several ways in which your organisation could benefit from offering student projects:

- Benefit from energetic and enthusiastic engineering students who provide fresh perspectives, new ideas and viewpoints
- Academic expert supervisors and technicians in your R&D activity
- Bridge the gap between academics and industry through input into the education process of future professionals and innovators
- Evaluate our engineering students for the possibility of employment after graduation
- Gain an extra set of hands for special projects with clear remits and defined outcomes

### MOTIVATED HIGH-CALIBRE STUDENTS

Tap into a ready-made pool of enthusiastic students, who are keen to roll up their sleeves, develop their skills and make a contribution to your business. Heriot-Watt students also:

- Gain practical real-world experience and learn new skills
- Achieve an extremely beneficial and enjoyable work based team project
- Learn about your organisation and industry.

### NO COST

- Taking part in this initiative has no cost to your company and bright innovative engineers will work with you to make a real difference to your organisation

## KEY DATES:

- Launch: 4th April
- Deadline for submission of project proposals: 15<sup>th</sup> August
- Decisions on proposals and notification to companies: 1<sup>st</sup> September
- Launch of the projects with allocated student teams: mid-September
- Submission of students' work: start-December
- Final report to companies: mid-December

## PROVIDING REAL SOLUTIONS



Company-led engineering design projects provide you with a great opportunity for expert academic input into your R&D activities.

Control lies with you; projects are proposed by the company and the work is undertaken by the students on a self-contained piece of work with a clear remit and a defined outcome.

**The process:** The project will be carried-out over a 12 week period from September to December. Students will each spend 150 hours on the project and will be working in teams of four. Each team will have an academic supervisor assigned and the company plays the role of the client.

**The Stages:** The project could cover the stages of an engineering design assignment, including: market research, brainstorming, concept generation and selection, simulations and calculations, design for manufacture, costing, sustainability, prototyping, assessment and materials testing.

Participating companies are asked to provide guidance to our students to ensure a successful project outcome. We ask that 'the client' (the company) attends the launch of the projects to meet and present the teams' project. It is recommended that the company appoints a representative or industrial supervisor to act as a point of contact for the duration of the project.

Taking part in this initiative has no cost to your company, only consumables or raw materials will be charged, if these are required for the design, prototyping or testing during the project. Any support given by academic staff and expert technicians during the project is at no cost.

## CONTACT:

To find out more about the company-led engineering design initiative and how we can work together, please contact

### **Dr Iain McEwan**

School of Engineering and Physical Sciences  
Heriot-Watt University  
Edinburgh  
EH14 4AS

**t:** +44 (0)131 451 3750

**e:** [i.mcewan@hw.ac.uk](mailto:i.mcewan@hw.ac.uk)

**w:** [www.hw.ac.uk](http://www.hw.ac.uk)

## WHAT DO EXISTING COMPANY PARTNERS SAY?

"Innovation is the key to commercial success and I feel the team working on the Touch Bionics project are gaining a diversified insight into some of the technical challenges we face and how we need to step up the creative thinking process."

**Hugh Gill**, *Chief Technical Officer at Touch Bionics*

"I was hoping to end up with a few prototype designs that we did not have the in-house expertise to develop. I am very happy with the results. Both projects resulted in excellent prototypes. One is already in consideration by a client of ours and the other is likely to have some serious interest in the very near future. Both are good pieces of work."

**Mark Zwinderman**, *MD of Aboleo Ltd*

"I have enjoyed working with the students, who have risen to the challenges set and been enthusiastic despite the tight targets set and setbacks encountered."

**Gordon MacDonald**, *ROV Engineer at Panton McLeod Ltd*

"The output from the project has been valuable for Macphie and we will be taking the ideas produced for further evaluation."

**Ashley Baker**, *head of R&D at Macphie of Glenbervie Ltd*

"This is a concept which was well received in the business community, using the resources and expertise of the university to benefit businesses that would not or could not have developed their ideas. So the win for the business is clear."

**George Foster**, *Borders College*